WHAT IS CLAIMED IS:

1. A method for nanopatterning of a substrate, comprising:

a) supplying a multilayer article comprising at least one deformable substrate, at least one brittle layer, and at least one coating layer adjacent said brittle layer, said coating layer having different physicochemical properties than said brittle layer;

b) exerting a strain on said multilayer article such that cracks develop in said brittle layer exposing surfaces in said cracks having no coating layer thereon.

2. The method of claim 1, wherein said step of exerting a strain comprises unidirectionally stretching said multilayer article.

3. The method of claim 1, wherein said step of exerting a strain comprises bending said multilayer article.

4. The method of claim 1, wherein said step of exerting a strain comprises stretching said multilayer article bending said multilayer artical.

5. The method of claim 1, wherein said deformable substrate comprises a polyorganosiloxane elastomer and said brittle layer comprises a silaceous layer.

6. The method of claim 5, wherein said coating layer comprises a hydrophobic coating.

7. The method of claim 5, wherein said coating layer comprises a first, hydrophobic coating, and a second coating on said first coating, said second coating comprising a substance which prevents attachment of biological organisms.

8. The method of claim 7, further comprising coating said exposed surfaces with a bioactive coating.

9. The method of claim 5, wherein said silaceous layer is formed by oxidizing a surface of said polyorganosiloxane deformable substrate.

10. The method of claim 1, wherein said step of exerting a strain comprises stretching said multilayer article in at least two directions, either simultaneously or sequentially.

11. A nanopatterned device comprising:

a) a deformable substrate;

b) a brittle layer on at least one side of said deformable substrate, and having a first set of physicochemical properties;

c) a coating layer on a side of said brittle layer remote from said deformable substrate, said coating layer having a second set of physicochemical properties different from said first set of physicochemical properties; and

d) cracks through said coating layer and into said brittle layer, surfaces of said cracks exhibiting physicochemical properties different from said second set of physicochemical properties.

12. The nanopatterned device of claim 11, wherein said cracks extend partly through said brittle layer.

13. The nanopatterned device of claim 11, wherein said cracks extend through said brittle layer and expose surface of said deformable substrate.

14. The nanopatterned device of claim 11, wherein said deformable substrate comprises a thermoplastic and/or an elastomer.

15. The nanopatterned device of claim 11, wherein said deformable substrate comprises an organopolysiloxane elastomer, and said brittle layer comprises a silaceous coating formed from a surface portion of said elastomer or deposited on said elastomer.

16. The nanopatterned device of claim 15, wherein said brittle layer comprises oxidized organopolysiloxane.

17. The nanopatterned device of claim 11, wherein said coating layer comprises a hydrophobic layer.

18. The nanopatterned device of claim 15, wherein said coating layer comprises a hydrophobic layer, and wherein said hydrophobic layer is formed by hydrophobicizing said silaceous coating with a silane.

19. The nanopatterned device of claim 17, wherein said coating layer comprises a hydrophobic coating layer and a bioactive layer on said hydrophobic layer.

20. The nanopatterned device of claim 19, wherein said bioactive layer comprises a layer which inhibits attachment of biological organisms.

21. The nanopatterned device of claim 20, wherein said cracks are coated with a bioactive coating which encourages attachment of biological organisms.

22. The nanopatterned device of claim 11, comprising a plurality of parallel cracks.

23. The nanopatterned device of claim 11, comprising a plurality of parallel cracks and a plurality of cracks at an angle to said plurality of parallel cracks.

24. A method of growing cellular organisms comprising plating of at least one cellular organism on cracks in the device of claim 11, and culturing said cellular organism.